

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
29 December 2004 (29.12.2004)

PCT

(10) International Publication Number  
**WO 2004/113378 A2**

- (51) International Patent Classification<sup>7</sup>: C07K 14/47, 7/06, 16/18, A61K 38/17
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (21) International Application Number: PCT/GB2004/002558
- (22) International Filing Date: 16 June 2004 (16.06.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 0313892.2 16 June 2003 (16.06.2003) GB
- (71) Applicant (for all designated States except US): HANNAH RESEARCH INSTITUTE [GB/GB]; Ayr KA6 5HL (GB).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): WILDE, Colin, James [GB/GB]; c/o Hannah Research Institute, Ayr KA6 5HL (GB). PEAKER, Malcolm [GB/GB]; c/o Hannah Research Institute, Ayr KA6 5HL (GB).
- (74) Agent: MURGITROYD & COMPANY; Scotland House, 165-169 Scotland Street, Glasgow G5 8PL (GB).

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## Declaration under Rule 4.17:

— of inventorship (Rule 4.17(iv)) for US only

## Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 2004/113378 A2

(54) Title: CONTROL OF LACTATION

(57) Abstract: The present invention provides three novel peptides identified from cow's milk and further to compositions and methods containing the same for use in the modulation of the milk secretion rate of a lactating cell. Specifically, at least one of the peptides provided by the invention can be used to control milk secretion in lactating animals, including man. The present invention further extends to antibodies directed to the peptides of the invention, said antibodies also having utility in the modulation of milk secretion.